

ABSTRACT

A computer-implemented modeling tool for wireless communications systems predicts signal strength by considering the effects of water on RF signals. The modeling tool creates a model of the RF signals' propagation between a transmitter and a receiver in the 5 wireless communications system. The modeling tool then determines the effect of at least one body of water located between the transmitter and the receiver on the modeled RF signal's propagation. Thereafter, the modeling tool outputs a signal strength value for the modeled RF signal based on the determined effect from the body of water located between the transmitter and receiver.